

## Rigid Duct Specifications

- 1.1 The rigid diffusion system, distributed by Prihoda, is made up of active and passive sections of laminated galvanized steel of robust gauge forming a circular duct with a perforation arrangement offering anticipated performances, all designed by software capable of providing graphical airflow models, sound power levels, dimensioned drawings, etc.
- 1.2 The sections of the ducts will be connected to each other by a SMACNA approved joint system capable of withstanding class 3 pressures and complying with the requirements of section 6.4.4.2.2 of ASHRAE 90.1- 2004. The assembly system is made up of two galvanized steel collars conforming to ASTM A653 and A924 standards, all assembled hot and sealed with an EPDM gasket conforming to fire and smoke propagation standards (ASTM standard test E84-91a with 0 flame / 5 smoke) according to the ULc standard required by the CNB (National Building Code),
- 1.3 The joint system must be evaluated without leakage under a positive pressure of 10 " w.g. (4.5 kPa), by independent laboratories Professional Service Industries, Inc., a division of Pittsburgh Testing Laboratories.
- 1.4 The ducts are suspended by a threaded rod (by others) covered with a tube (rod cover) of a color chosen by the architect.
- 1.5 Each section will be powder coated (without TGIC) in a color chosen by the architect, according to the RAL color charter and protected by a self-adhesive membrane (to be removed after installation).
- 1.6 The diffuser must ensure a high induction rate, in order to ensure a minimum temperature differential in the air jet in the occupied area. That is to say the ratio of the difference between the temperature of the set point and the temperature of the air projected by the diffuser in the occupied zone, by the difference between the temperature of the set point and the temperature of the supply (cooling or heating); must be minimized.
- 1.7 The performance of diffusers must ensure a terminal speed of less than 50 ppm (0.25 m / sec) in the occupied area.
- 1.8 The sound levels at maximum flow rate must not exceed 30 NC.